3-868-286-01 (1)

Video Graphic Printer

Instructions for Use Page 20 GB

(For UP-895MD/895CE)

UP-895
UP-895MD
UP-895CE

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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED.

For UP-895MD/895CE

Symbol on the products

This symbol indicates the equipotential terminal which brings the various parts of a system to the same potential.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the U.S.A. (for UP-895/895MD)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This device requires shielded interface cables to comply with FCC emission limits.

For the customers in Canada (for UP-895MD)

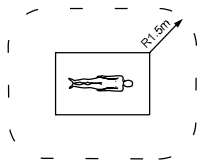
This unit has been certified according to Standard CSA C22.2 NO.601.1.

For UP-895MD/895CE

Important safeguards/notices for use in the medical environments

1. All the equipments connected to this unit shall be certified according to Standard IEC601-1, IEC950, IEC65 or other IEC/ISO Standards applicable to the equipments.
2. When this unit is used together with other equipment in the patient area*, the equipment shall be either powered by an isolation transformer or connected via an additional protective earth terminal to system ground unless it is certified according to Standard IEC601-1.

* Patient Area



3. The leakage current could increase when connected to other equipment.

4 This equipment generates, uses, and can radiate frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause interference to other equipment. If this unit causes interference (which can be determined by unplugging the power cord from the unit), try these measures: Relocate the unit with respect to the susceptible equipment. Plug this unit and the susceptible equipment into different branch circuit. Consult your dealer. (According to Standard EN60601-1-2 and CISPR11, Class B, Group 1)

Caution

When you dispose of the unit or accessories, you must obey the law in the relative area or country and the regulation in the relative hospital.

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Overview

The UP-895/895MD/895CE is a black and white video graphics printer that can be used to print images displayed on a video monitor.
This manual covers the UP-895/895MD/895CE models. Wherever the operation or any other item differs among the models, this manual clearly describes those differences.

Clear, consistent print quality

- High definition, 12.8 dots/mm printing using a thermal head with a high-speed drive IC.
- 256 gradations of black and white.
- Stable printouts using temperature compensation technology

Fast printing

- You can make an A-7 size single printout in about 3.9 seconds in STD and NORM mode.
- You can make a maximum of 11 copies of the same image continuously.

Two way printing direction and various image sizes

- The printing direction selector on the front panel enables you to print in vertical and horizontal directions.
- The image size selector on the front panel enables you to select various printing size.

DIP switches and slide switches to optimize the printer

- You can adjust printout quality and select the paper type by setting the slide switches.
- You can make printouts starting either from the bottom or top of the image by setting the DIRECTION of DIP switch.
- You can set the printout aspect ratio to 4:3 or 1:1 by setting the ASPECT of DIP switch.
- You can set the range to be printed by setting the SCAN DIP switch.
- You can save paper by setting the POSTFEED DIP switch (paper saving function).

Automatic video signal determination

The type of input signal, black and white (EIA or CCIR) or input color (NTSC or PAL), is automatically determined and printed in the same duration and size.

Alarm buzzer

The alarm buzzer prevents you from making any mistakes.

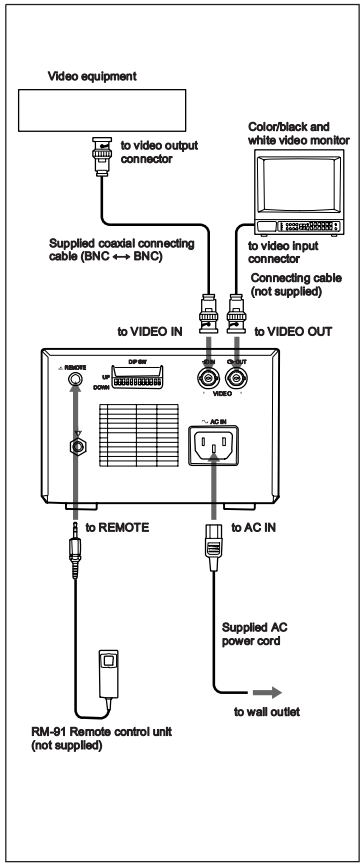
Easy and quick paper loading

You can load paper just by opening the door and placing the paper roll.

Connection

Notes

- Turn off the power to each device before making any connections.
- Connect the AC power cord last.



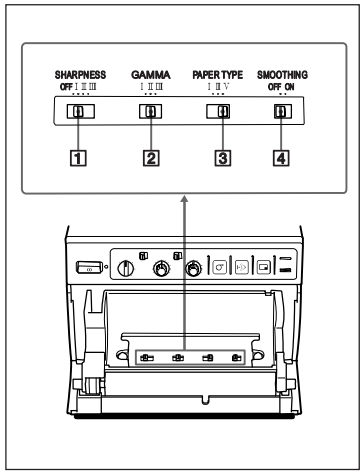
Setting Up the Printer

You can set the printer to the desired specifications using two kinds of switches.

- Slide switches on the paper tray inside the front door
  You can easily set the printer specifications most frequently used in daily operation, such as selection of the paper type and printout quality.
- DIP switches on the rear panel
  You can set the print mode and other settings you do not need to change frequently

Setting the Slide Switches on the Paper Tray

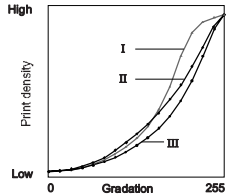
The factory settings are as follows.



1 SHARPNESS switch
Adjusts the sharpness of the printout.
OFF: Not to emphasize an outline of the printout, set the switch to this position.
I, II, III: To make a sharper outline, set the switch to the proper position. In I, II and III order, the printout becomes sharper.

2 GAMMA switch
Sets the tone of printouts (density gradation).
I: Soft gradation
II: Standard
III: Hard gradation

The diagram below shows the curve of density graduation for each tone.



Note
This switch is effective only when you use paper types UPP-110HD or UPP-110HG, that is, when the PAPER TYPE switch 3 is set to either II or V.

3 PAPER TYPE switch
Selects the paper type.
Set the switch to the type of paper to be used.

Type of paper	Switch position
UPP-110S	I (Normal)
UPP-110HD	II (High density)
UPP-110HG	V (High glossy)

4 SMOOTHING switch
Selects the line density.
OFF: Normally keep this switch to this position.
ON: To set the print line density to high density and obtain the better print quality, set the switch to this position. However, the printing speed is slower than at the OFF position.

Note
This switch becomes effective under the following conditions.

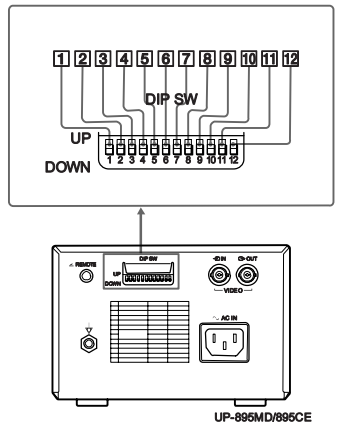
- When the image size selector on the front panel is set to either SML or NOR and STD/SIDE selector is set to STD, and ASPECT of DIP switch 3 on the rear panel is set to 4 : 3.
- When the image size selector is set to a position other than SML and NOR and ASPECT of DIP switch 3 is set to 1 : 1.

Under any other conditions except those above, the print line density is not set to high and the print quality is standard even if you set the switch to ON.

Setting the DIP Switches on the Rear Panel

To change the DIP switch settings
Use a small pointed tool such as a small screwdriver.

The factory settings are as follows.



DIP SW FUNCTION TABLE

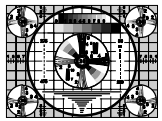
NO.	FUNCTION	SW-DOWN	SW-UP
1	INTERRUPT	ON	OFF
2	POSTFEED	ON	OFF
3	ASPECT	4:3	1:1
4	MEMORY	FRAME	FIELD
5	DIRECTION	NORM	REV
6	SCAN	–	WIDE 2
7		WIDE 1	NORM
8	OUTPUT	THRU	EE
9	AGC	OFF	ON
10	RESERVED	–	–
11	INPUT	B & W	COLOR
12	75 Ω	ON	OFF

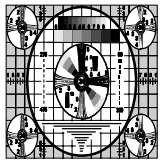
SW-DOWN or SW-UP indicated in parentheses shows the switch position.

1 INTERRUPT switch
Sets whether the PRINT button is activated to enable interruption of the printing process and capture an image in memory.
ON (SW-DOWN): Interrupts the printing currently under way and prints a new picture when you press the PRINT button during printing.
OFF (SW-UP): Disregards the fact that the PRINT button is pressed during printing and continues the printing currently under way.
If you press the PRINT button during printing in the OFF mode, the alarm buzzer will sound.

2 POSTFEED switch
Sets extra blank paper once an image has been printed.
ON (SW-DOWN): Feeds out extra blank paper once an image has been printed.
OFF (SW-UP): Does not feed out extra blank paper once an image has been printed.
To save paper by feeding only a short length of paper after printing an image, set this switch to OFF. In this way, you can make more printouts per roll of paper, but you have to feed the paper manually using the FEED button and tear off the paper. When you make multiple copies of the same printout, this position is effective in helping to save paper.

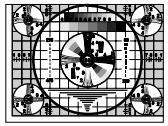
3 ASPECT 4:3/1:1 switch
Normally keep this switch set to 4:3 (SW-DOWN).
When the aspect ratio of the video signal is 1:1, set it to 1:1 (SW-UP).
The printout will be longer than a printout made at 4:3.

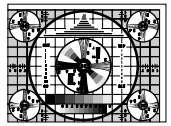

4:3


1:1

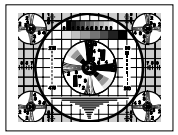
4 MEMORY switch
FRAME (SW-DOWN): Normally keep this switch set to this position.
FIELD (SW-UP): When printing fast-moving images (such as a ball being thrown), the printout may blur. If this happens, set the switch to this position. The printout definition will be poorer but less blurred.

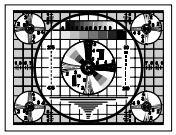
5 DIRECTION switch
Selects whether the top or bottom of the screen is to be printed first.
NORM (SW-DOWN): Normally keep this switch set to this position. Printing is done from the bottom of the screen.
REV (SW-UP): Starts printing from the top of the screen.

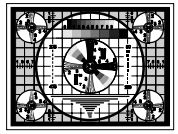

NORM


REV

6 7 SCAN switch
Sets the printout range. The printout range is progressively widened in the NORM, WIDE 1, and WIDE 2 order.
NORM (Switch 7, SW-UP position): Prints only the image displayed on the standard screen size of the video monitor.
WIDE 1 (Switch 7, SW-DOWN position): Prints when the signal scans beyond the edge of the standard monitor screen.
WIDE 2 (Switch 6, SW-UP position): To further extend the range, select this setting.
When you set Switch 6 to the SW-UP position (WIDE 2 position), WIDE 2 is selected regardless of the setting of SCAN switch 7.


NORM


WIDE 1


WIDE 2

8 OUTPUT switch
Selects the video signal output from the VIDEO OUT connector on the rear panel.
THRU (SW-DOWN): Signals are output directly to the video monitor.
EE (SW-UP): Signals are output to the video monitor after being processed by the printer.

9 AGC (Automatic Gain Control) switch
Adjusts the input signal to the optimum printing level.
OFF (SW-DOWN): Normally keep this switch set to this position.
ON (SW-UP): When the printout image appears too dark or too light, set the switch to this position to adjust the input signal to the optimum level.

10 RESERVED switch
Keep this switch set to the factory setting (SW-DOWN)

11 INPUT switch
B & W (SW-DOWN): When the signal to be printed is black and white, set the switch to this position.
COLOR (SW-UP): When the signal is color, set the switch to this position.

12 75 Ω ON/OFF switch
ON (SW-DOWN): When nothing is connected to the VIDEO OUT connector, set the switch to this position.
OFF (SW-UP): When a video monitor or other video equipment is connected to the VIDEO OUT connector, set the switch to this position.
Example:
When you connect two printers to one piece of video equipment, set the 75Ω switch of one of the printers to ON, and the other to OFF.
When you connect the printer and a video monitor to the video equipment, set the 75Ω switch to OFF.

Paper

Use only UPP-110S/110HD/110HG paper as specified for the UP-895/895MD/895CE. If another type of paper is used, the quality of the printout cannot be guaranteed. Use of another type of paper may also cause malfunction of the printer.
You cannot use the UPP-110HA paper as specified for the UP-880/890MD/890CE.

Type of paper

The following types of paper are available.

Printing quality	Type of paper
TYPE I (Normal)	UPP-110S
TYPE II (High Density)	UPP-110HD
TYPE V (High Glossy)	UPP-110HG

Notes on paper

Storing unused paper

Avoid storing unused paper in a location subject to the following. Storage of unused paper in such a place results in deterioration of unused paper.
- Store unused paper in a cool and dark place (below 30°C or 86°F).
- Do not store unused paper in a hot or humid place. Do not leave unused paper in direct sunlight or other bright places.
- Do not allow any volatile organic solvent or vinyl chloride to touch unused paper. Alcohol, plastic tape or film will deteriorate unused paper.

When loading paper

- Do not fold the paper or touch the printing surface. Dust or finger prints are likely to cause poor print quality.
- Before loading the paper roll, remove the label attached to the top of paper roll and pull out the first 15 to 20 cm (6 to 8 inches). The label mark is likely to cause poor print quality.

Storing printouts

- Avoid storing printouts in a location subject to the following. Storage of your printouts in such a place results in fading of printouts.
  - Store printouts in a cool and dark place (below 30°C or 86°F). We recommend storing printouts in a bag made of clay-free paper or polypropylene.
  - Do not store printouts in a hot or humid place. Do not leave printouts in direct sunlight or other bright places.
  - Do not allow any volatile organic solvent or vinyl chloride to touch printouts. Alcohol, plastic tape or film will cause the printout to fade.
- Do not stack your printouts on or under a diazo copy sheet. Also do not attach the printed surface to another printed surface. The printout may become discolored.
- To attach the printout to another piece of paper, use double-sided adhesive tape or water-based glue.

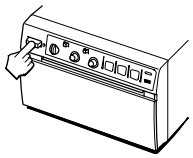
Loading Paper

Notes

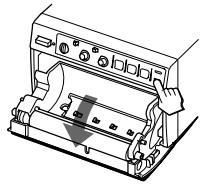
- Before loading paper, read "Paper" on page 25.
- Do not fold the paper or touch the printing surface. Dust or finger prints are likely to cause poor print quality.
- Use only UPP-110S/110HD/110HG paper as specified for this printer. (page 25)
- Set the PAPER TYPE switch according to the paper type. (page 23)

Loading

1 **Press the power switch to turn on the printer.**
The power lamp lights.



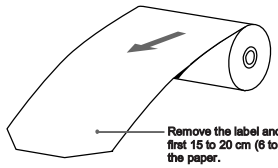
2 **Press the OPEN button to open the door.**



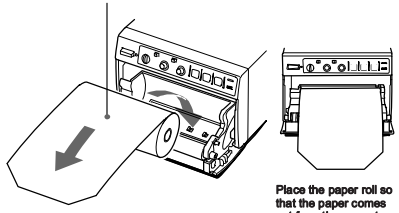
3 **Remove the label attached at the top of the paper roll, pull out the first 15 to 20 cm (6 to 8 inches) of the paper, then place the paper roll in the paper tray.**

Note

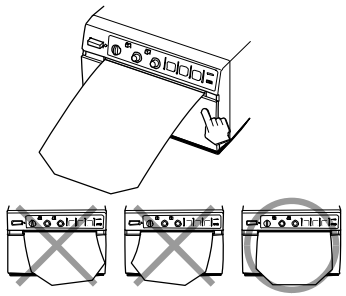
When pulling out the top of the paper roll or placing it in the paper tray, be careful not to drop the paper roll. If dust has accumulated on the paper, you may not be able to use this paper because dust or finger prints are likely to cause poor print quality or malfunction of the head.



Place the paper with the thermo-sensitive side (printing side) up. If you place the paper with the printing side down by mistake, the image will not be printed.



4 **Close the door by pushing it.**



Note

- If the paper roll is not placed properly and does not come out from the paper tray straight, this may cause paper jamming.
- If you did not pull out the paper enough in step 3, feed the paper at least 15 to 20 cm by pressing and holding down the FEED button. **Do not pull out the paper manually.**

Printing

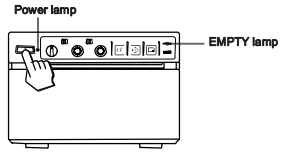
Before making printouts

Confirm the following:

- Are the connections correct? (page 22)
- Are the slide switches and DIP switches set correctly? (pages 22 and 23)
- Is the paper type set correctly? (page 23)
- Is the paper roll loaded properly? (page 26)
- Is the video source being input?

Making Printouts

1 **Press the power switch to turn on the printer.**
The power lamp lights and the EMPTY lamp blinks for a few seconds.



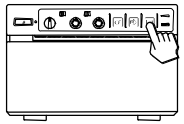
Note

Make sure that the EMPTY lamp turns out after blinking for a few seconds. If lit, the paper has run out. Load the paper. ("Loading Paper" on page 26)

2 **Select the printing direction and image size.**
See "Selecting the Printing Direction/Image Size" on the next page.

3 **Start the video source.**
This operation is done using the controls of the video equipment which you are using as a source.

4 **When the image you want to print is on the video monitor, press the PRINT button.**
The image displayed at the instant you press the PRINT button is captured into memory and is printed out immediately.



To interrupt printing

Press either the OPEN or FEED button while printing. The printer stops printing.

To stop printing and print another image displayed on the video monitor

To do this, DIP Switch 1 (INTERRUPT) must be set to ON (SW-DOWN). (See page 24.)
Press the PRINT button while printing or copying. The printer stops printing, captures the new image, and starts printing the new image.
In SMALL mode, the printer stops printing and captures the first image.

If the printout image is blurred

A rapidly moving image may be blurred when printed. Should this occur, change DIP Switch 4 (MEMORY) to FIELD (SW-UP). (See page 24.) The printout quality will be poorer, but less blurred.

To print in SMALL mode

You can print in SMALL mode, where two different images can be captured and printed together on one printout, by setting the image size selector on the front panel to the SML position.
To print in SMALL mode: Press the PRINT button twice in step 4. When you press the PRINT button once, the buzzer sounds and the first image is captured. The printer starts printing after the PRINT button is pressed twice.
For detailed information on SMALL mode, see "Selecting Printing Direction/Image Size" on the next page.

To feed the paper

Press and hold down the FEED button to feed the paper.
Do not pull out the paper manually.

Storing printouts

- Avoid storing printouts in a location subject to the following. Storage of your printouts in such a place results in fading of printouts.
  - Store printouts in a cool and dark place (below 30°C or 86°F). We recommend storing printouts in a bag made of clay-free paper or polypropylene.
  - Do not store printouts in a hot or humid place. Do not leave printouts in direct sunlight or other bright places.
  - Do not allow any volatile organic solvent or vinyl chloride to touch printouts. Alcohol, plastic tape or film will cause the printout to fade.
- Do not stack your printouts on or under a diazo copy sheet. Also do not attach the printed surface to another printed surface. The printout may become discolored.
- To attach the printout to another piece of paper, use double-sided adhesive tape or water-based glue.

Making copies of the last printout

Press the COPY button. The printer makes a copy of the last printout. The image of the last printout is retained in the printer's memory until you press the PRINT button again or turn the power off.

To copy in different directions and sizes

You can copy the last printout in different directions and sizes except in SMALL mode.
Before pressing the COPY button, select the printing direction and size as described in "Selecting the Printing Direction/Image Size" (See this page.)

Notes

- If you press the COPY button immediately after turning the power on, the alarm buzzer will sound as nothing is stored in memory.
- In the SMALL mode, if you press the COPY button after you have pressed the PRINT button only once, the alarm buzzer will sound and the printer will not copy.

To make multiple copies of the same printout

Press the COPY button as many times as necessary (maximum 11 copies including the first printout) while printing or copying the first printout. Each time you press the COPY button, a short buzzer sounds.

To interrupt copying

Press either the OPEN or FEED button.

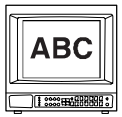
Selecting the Printing Direction/ Image Size

You can make variations of printouts using the STD/SIDE selector, image size selectors and the DIP switches.

Selecting the printing direction

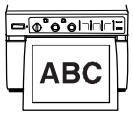
You can select the printing direction using the STD/SIDE selector.
To print in the same direction as the one displayed in the video monitor, set the selector to STD (standard).
To print the image in the direction where the image is rotated by 90 degrees counterclockwise, set the selector to SIDE.

Image displayed on the video monitor

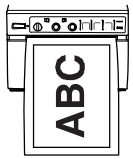


Printouts

When set to the STD position



When set to the SIDE position



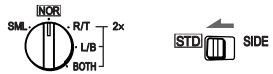
Selecting the image size

You can print in normal or small size by changing the image size selector.
You can also obtain a printout of the image at the left or right, top or bottom of the video image on the monitor after it has been enlarged twice.

Variations of printouts

Printouts obtained by the combination of the STD/SIDE selector and image size selector

The table in the right colum shows various printouts that can be obtained according to the combination of settings of the STD/SIDE selector and image size selectors.



In addition to variations in the right colum, the following printout variation is available.

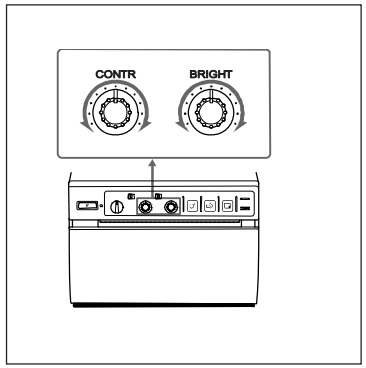
Negative printouts

You can make negative printouts by setting the POSI/NEGA switch on the front panel to the NEGA position.

Image size selector position	Printing direction selector position	
	STD	SIDE
NOR (Normal)		
SML (Small)		
R/T (Right/Top)		
L/B (Left/Bottom)		
BOTH		

Adjusting the Contrast and Brightness

You can adjust the contrast and brightness of the printout.



Note

To adjust the contrast and brightness while confirming the adjusted image on the video monitor, set DIP Switch 8 (OUTPUT) to EE (SW-UP).
After adjusting the contrast and brightness, be sure to reset DIP Switch 8 to THRU (SW-DOWN).
Since the video signal is directly input to the video monitor without being processed by the printer when the setting is THRU, you can monitor the video signal as it is input directly from the video equipment.

To adjust the contrast

You can adjust the contrast of image using the CONTR control.
To make the contrast stronger, turn the CONTR control clockwise.
To make the contrast weaker, turn the CONTR control counterclockwise.

To adjust the brightness

You can adjust the brightness of printouts using the BRIGHT control.
To make the image brighter, turn the BRIGHT control clockwise.
To make the image darker, turn the BRIGHT control counterclockwise.

Note

You cannot adjust the image once it has been captured in memory. Restore an image after adjustment by pressing the PRINT button.

Remotely Controlling the Printer

You can remotely control the printer using the RM-91 remote control unit or the foot switch connected to the REMOTE connector on the rear panel.

Since the button on the remote control unit or foot switch functions exactly same as the PRINT button, pressing either of them during printing or copying results in an image being captured and immediately printed when DIP Switch 1 (INTERRUPT) on the rear panel is set to ON (SW-DOWN). (See page 24.)

Precautions

On safety

- Check the operating voltage before operation. Operate the unit only with a power source specified in "Specifications".
- Stop operation immediately if any liquid or solid object falls into the cabinet. Unplug the unit and have it checked by qualified personnel.
- Unplug the unit from the wall outlet if you will not be using it for a long time. Disconnect the power cord by grasping the plug. Never pull the cord itself.
- Do not disassemble the cabinet. Refer servicing to qualified personnel only.
- Do not touch the cutting blade of the printer.
- Connect the power plug of the printer to a wall outlet with a protective earth terminal. The safety earth should be properly established.

On operation

Do not turn the power off while the printer is printing. The thermal head may be damaged.

On the printer carriage

Do not carry or move the printer when the paper roll is placed in the printer. Doing so may cause a malfunction.

On installation

- Place the printer on a level and stable surface. If you use the printer with placed on an uneven surface, malfunction of the printer is likely to occur.
- Do not install the printer near heat sources. Avoid locations near radiators or air ducts, or places subject to direct sunlight or excessive dust, humidity, mechanical shock or vibration.
- Provide adequate air circulation to prevent heat build-up. Do not place the printer on surfaces such as rugs, blankets, etc., or near materials such as curtains and draperies.
- If the printer is subjected to wide and sudden changes in temperature, such as when it is moved from a cold room to a warm room or when it is left in a room with a heater that tends to produce large amounts of moisture, condensation may form inside the printer. In such cases the printer will probably not work properly, and may even develop a fault if you persist in using it. If moisture or condensation forms, turn off the power and allow the printer to stand for at least one hour.

Maintenance

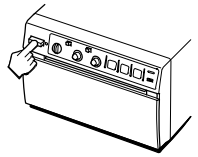
Cleaning the cabinet

Do not use strong solvents to clean the printer. Thinner or abrasive cleansers will damage the cabinet.

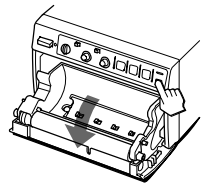
Cleaning the thermal head

If the printout is dirty or white stripes appear on the printouts, clean the thermal head using the cleaning sheet supplied .

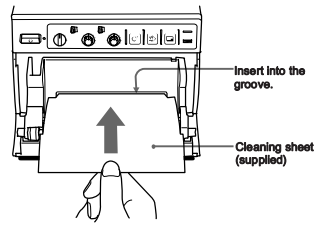
1 Press the power switch to turn on the printer.



2 Press the OPEN button to open the door.



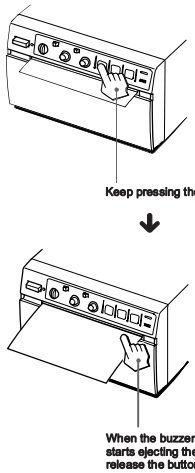
3 Insert the cleaning sheet, with the black surface facing down, into the groove in paper tray.



Continue to next page →

4 **Close the door by pushing it.**

5 **Press the FEED button and keep it pressed.**
When the buzzer sounds and the printer start ejecting the cleaning sheet, release the FEED button.


Keep pressing the FEED button.
When the buzzer sounds and the printer starts ejecting the cleaning sheet, release the button.

Cleaning is completed.

6 **Press the OPEN button to open the door and remove the cleaning sheet.**

7 **Close the door by pushing it.**

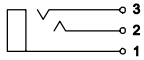
Notes

- Do not press the PRINT or COPY button while the cleaning sheet is in the printer.
- Clean the head only when necessary. If you clean the head too often, it may cause a malfunction.

Specifications

Power requirements and consumption
100 to 120 V AC, 50/60 Hz, 1.5 A
220 to 240 V AC, 50/60 Hz, 0.8 A
Operating temperature
5°C to 35°C (41°F to 95°F)
Operating humidity
20 % to 80 % (no condensation allowed)
Dimensions Approx. 154 × 105 × 260 mm (w/h/d) (6⅛ × 4¼ × 10¼ inches)
Mass Approx. 3.4 kg (7 lb 8 oz), Main unit only
Thermal head Thin-film thermal head (with built-in drive IC) 1280-dot drive
Gradation 256
Resolution (in WIDE 1 mode)
EIA: 1210 × 490 dots
CCIR: 1210 × 582 dots
Print size (in NOR and WIDE 1 mode)
STD mode
EIA: 94 × 72 mm
CCIR: 94 × 71 mm
SIDE mode
EIA: 126 × 96 mm
CCIR: 126 × 95 mm
Printing speed (in STD and NOR mode)
About 3.9 seconds/screen (at factory settings)
Picture memory
800 K × 8 bits for one frame
Input/output connectors
VIDEO IN (BNC)
EIA or CCIR Composite video signals
1.0 Vp-p, 75 ohms/high-impedance (EIA/CCIR automatically discriminated)
VIDEO OUT (BNC)
EIA or CCIR Composite video signals
1.0 Vp-p, 75 ohms, loop-through/EE switchable

REMOTE (stereo minijack)



1 GND
2 PRINT SIGNAL (TTL)
Input of LOW pulse over 100 msec. initiates print.
3 PRINT BUSY (TTL)
Goes HIGH during printing.

Supplied accessories
Paper roll (UPP-110HG) (1)
BNC ⟷ BNC connecting cable (1)
AC power cord (1)
Head cleaning sheet (1)
Media label (1)

The following specifications are applied only to the UP-895MD/895CE models:
Storage and transport temperature
–20°C to 60°C (–4°F to 140°F)
Storage and transport humidity
20 % to 80 % (no condensation allowed)
Protection against electric shock
Class I
Protection against harmful ingress of water
Ordinary
Degree of safety in the presence of flammable anesthetics or oxygen
Not suitable for use in the presence of flammable anesthetics or oxygen
Mode of operation
Continuous

Design and specifications are subject to change without notice.

Troubleshooting

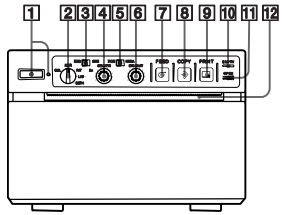
The following troubleshooting checks will help you correct the most common problems you may encounter with your printer. Before proceeding with these trouble check, first checks that the power cord is firmly connected. Should the problem persist, unplug the printer and contact your Sony dealer or local authorized Sony service facility.

Symptom	Cause/remedy
White specks on the first few printouts.	When printing with a newly inserted roll of paper, dust on the surface of the paper may cause white specks on the printouts. → Feed the paper by pressing the FEED button until clean paper appears. (page 26)
Printing does not start when you press the PRINT button.	• Paper does not feed. → Is the paper slack? → Is the power turned on? → Are all connections correct? → Did you press the PRINT button twice in SMALL mode? (page 27) • When the alarm buzzer sounds: → Has the thermal head overheated? The thermal head may overheat when the printer prints dark image continuously. In such a case, the EMPTY lamp blinks. Wait until the head cools down. → Is the video signal of the image input? → Is the paper loaded correctly? • Paper feeds, but printing does not start. → Is the paper loaded with the thermo-sensitive side up? (page 26)
Black borders or missing portions around the printout.	This problem may result from the video signal input to the printer. → Change the setting of the DIP switches 6 and 7 (SCAN). (page 24)
Paper jam	• Open the door by pressing the OPEN button, then pull the jammed paper slowly and remove it. • There is condensation inside the unit. → Moving the unit suddenly from a cold place to a warm place often results in condensation forming. In the event of condensation forming, remove the paper, turn off the power and allow the unit to stand for about one to two hours.
The printout is dirty.	The thermal head is dirty. → Clean the thermal head with the head cleaning sheet supplied with the unit. (page 31)
The printer stops printing when it continuously prints dark images. (The alarm buzzer sounds.)	This is likely to occur when the printer prints continuously 15 or more dark images. In such a case, the buzzer sounds. This is because a protective circuit guards against heat build-up in the thermal head. Stop printing for a while.
White lines or small letters on the screen are not printed clearly.	Is DIP Switch 11 (INPUT) set to B & W when the input signal is a black and white signal? (page 25)
Small squares appear over the whole screen.	Is DIP Switch 11 (INPUT) set to COLOR when the input signal is a color signal? (page 25)
The printout is too dark or too light.	• Is the DIP switch 12 (75Ω) set correctly? (page 25) • Is the PAPER TYPE switch in the paper tray set correctly? (page 23) • Is the GAMMA switch in the paper tray set correctly? (page 23)
The printout seems stretched or enlarged.	The DIP switch 3 (ASPECT) is set to 1:1. → Set it to 4:3. (page 24)

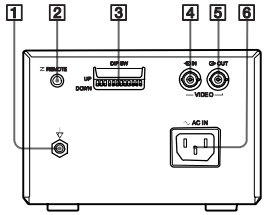
Location and Function of Parts

For details, refer to the pages indicated in parentheses.

Front



Back



UP-895MD/895CE

Front

1 Power switch and lamp
Turns the power on. The power lamp is lit while the power is on.

2 Image size selector (29)
Selects the size of the image to be printed.

3 STD (standard)/SIDE selector (28, 29)
Selects the printing direction.

4 CONTR (contrast) control (30)
Adjusts the contrast of the printouts.

5 BRIGHT (brightness) control (30)
Adjusts the brightness of the printouts.

6 POSI(positive)/NEGA (negative) selector (29)
Set this to the NEGA position to make negative printouts.

7 ♂FEED button (26, 27, 28, 32)
Press to feed paper. The paper feeds as long as the FEED button is held down.
Pressing this button during printing results in an interruption of the printing.

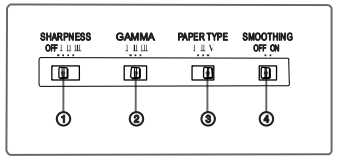
8 COPY button (28)
Prints another copy of the previous printout.

9 PRINT button (27)
Prints the image currently displayed on the video monitor. The image displayed when you press the PRINT button is stored in memory.

10 EMPTY lamp (27)
Lights when the printer is out of paper.

Continue to next page →

11 OPEN button (26, 31)
Opens or closes the door. Also, interrupts printing midway.
When the door is open, you can see the slide switches in the paper tray.



① SHARPNESS switch
Adjusts the sharpness of the printout.

② GAMMA switch
Sets the tone of the printouts (density gradation).

③ PAPER TYPE switch
Selects the paper type.

④ SMOOTHING switch
Selects the line density.

For detailed information on slide switches, see "Setting the Slide Switches on the Paper Tray" on page 22.

12 Paper feeder and cutter
Cuts the printing paper.

Back

1 ⏚Equipotential terminal (only for UP-895MD/895CE)
Used to connect to the equipotential plug to bring the various parts of a system to the same potential.
Refer to "Important safeguards/notice for use in the medical environments" on page 20.

2 REMOTE connector (22, 30)
Connect the RM-91 remote commander or the foot switch for controlling print operation from a distance.

3 DIP SW (switches) (23)
Sets the print modes and functions.

4 VIDEO IN (input) connector (BNC type) (22)
Connect to the video output connector of the video equipment.

5 VIDEO OUT (output) connector (BNC type) (22)
Connect to the video input connector of the video monitor. The output signal type depends on DIP switch 8 (OUTPUT).

6 ∿AC IN (AC power input) connector (22)
Connect to a wall outlet using the AC power cord supplied with the unit.